IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

John Mueller

Serial No. 10/511,419

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For: CLEANING SPRAY NOZZLE

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Group Art Unit: 3752

Examiner: Dinh Q. Nguyen

Confirmation No.: 4438

VIA FACSIMILE 571-273-8300

PRE-APPEAL BRIEF REQUEST FOR REVIEW

In response to the Final Official Action dated May 8, 2007, applicant submits the following Pre-Appeal Brief Request for Review.

1. Neither Styne nor Styne et al. anticipate the claimed invention.

The Examiner rejected claims 1, 2, 4, 10-13, 15 and 21 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,881,955 to Styne ("Styne") and U.S. Patent No. 5,332,158 ("Styne et al."). Applicant's spray nozzle is patentable over both Styne and Styne et al. Specifically, neither Styne nor Styne et al. teach a first trigger valve for controlling the flow of water through the spray nozzle and a second toggle valve that permits the user to select between a flow of either all water or a mixed chemical and water spray. For the same reasons, the combination of Styne and Styne et al. fail to render the claims obvious.

2. U.S. Patent No. 5,332,158 to Styne et al.

Styne et al. teaches a spray gun type applicator for use in the art of lawn and garden chemical application, i.e., a hose end lawn or garden sprayer to apply fertilizers, pesticides or other chemicals at a fixed, low dilution ratio. (Col. 1, lines 11-13). More specifically, Styne et al. teaches a spraying apparatus having a sprayer head and an interchangeable cartridge, the

spraying apparatus having a fluid inlet conduit that directs flow into a mixing conduit and an aspirator port that connects the mixing conduit with a second fluid in the cartridge so that the second fluid is drawn from the cartridge and mixes with the first fluid and is discharged into the environment via a nozzle. (Col 2, lines 58-69.)

The Styne et al. trigger provides an arrangement whereby:

> By activating a trigger means 67, the first fluid is directed to flow through the fluid inlet conduit 5 and to the valve 79. If the cartridge contains a dry chemical or if further dilution is necessary, the first fluid can be directed down a filler port 69 and into the cartridge to cause proper dilution of the chemical therein.

Styne et al. also provides a mixing arrangement, as follows:

> Upon proper dilution, the valve 79 can be moved to a second, flow position where the first fluid now flows into a mixing conduit 13 and causes the second fluid to also flow through the aspirator port 19 into the mixing conduit via aspiration where it is further diluted and is discharged into the environment.

Styne et al., col. 6, lines 53-59. To summarize, if the trigger of Styne is depressed, water and the chemical from the cartridge are being mixed. When the valve 79 is opened, water and chemicals are exiting the nozzle. Styne et al. has no provision for simply spraying water without the chemical unless the cartridge is either empty or not attached

3. The Claimed Invention

The claimed invention relates to a cleaning spray nozzle having a removably attached cartridge that selectively disperses a chemical, such as a soap, into a water stream flowing from the spray nozzle. Additionally, the claimed invention recognizes an additional step not necessary to or taught by the Styne et al. reference, that is, a rinsing step. Specifically, claim 1 of the claimed invention provides

> A cleaning spray nozzle which comprises:
> a nozzle body including an inlet for receiving water;
> a trigger valve operable to infinitely vary the flow of water through the water flow continuum from a fully open continuum to a fully closed continuum;

a toggle valve downstream of the trigger valve, the toggle valve being operable to direct flow between a clean water flow channel and a chemical dispensing flow channel;

an outlet for discharging either clean water from the clean water flow channel or clean water and a chemical from the chemical dispensing flow channel downstream of the toggle valve; and

a cartridge releasably secured to a portion of the nozzle body, the cartridge containing a chemical therewithin, the cartridge having an outlet that permits the flow of the chemical into the chemical dispensing flow channel.

(Emphasis Added). The claimed invention provides such a capability so that the user can first spray an area, such as a shower, by actuating the trigger valve and the toggle valve at the same time, with the mixed water and chemical substance and then rinse the area with just water, by only actuating the trigger valve.

4. Clear Errors in the Office Action.

Upon rejecting the claims, the Office Action states "Styne et al. discloses a cleaning spray nozzle comprising: a nozzle body 1, a trigger valve 67, a toggle valve 41, outlet 27, and a cartridge 55.

Clear error #1. Item 67 refers to the trigger, not the trigger valve, which is not actually identified in the drawings.

Clear error #2. Item 41 refers to the cap lid, not a toggle valve. Stein et al. discloses a diverter valve 79 which is used in a first position to direct fluid into the cartridge, such as when a chemical needs to be diluted, or in a second position to direct fluid to the mixing conduit 13.

Clear error #3. In order to anticipate an invention, a particular reference must disclose each and every feature of the claimed invention. Styne et al. does not disclose "a toggle valve downstream of the trigger valve, the toggle valve being operable to direct flow between a clean water flow channel and a chemical dispensing flow channel" such as is taught by the claimed invention. As a result, Styne et al. is not capable of directing a water stream while a cartridge is

attached, such that a user could alternate between a water stream and mixed chemical and water stream, unless such cartridge is empty. For theses reason, Styne et al. does not anticipate the claimed invention and the rejection with respect to Styne et al. should be withdrawn.

5. U.S. Patent No. 5,881,955 to Styne.

Styne teaches a spraying device for lawn and garden applications that keeps the chemical in a closed system until the operator engages the trigger. Secondarily, Styne teaches a sprayer in which the metering orifice is preset so that the end user does not have to worry about adjusting the water to chemical ratio.

The Styne trigger provides an arrangement whereby:

> when an operator engages the trigger, a gear engages and rotates a ball valve gear, which in turn, rotates a ball valve thereby opening a water fluid path. *Subsequently, in the same movement, the ball gear engages and rotates a fork gear which depresses a slider cam which, in turn, depresses a metering valve in the chemical fluid cartridge that opens a chemical fluid path.* In the preferred embodiment, the trigger has an extension that engages one end of a cantilever. As the trigger engages one end of the cantilever, the other end of the cantilever engages a cam. The cam, in turn, engages and depresses a metering valve. The depressed movement of the metering cam opens the fluid path to the chemical cartridge.

Styne, col. 2, lines 44 – 56 (emphasis added). To summarize, if the trigger of Styne is depressed, water and the chemical from the cartridge are being mixed and are exiting the nozzle. Styne has no provision for simply spraying water without the addition of a chemical.

6. Clear Errors in the Office Action.

Upon rejecting the claims, the Office Action states "Styne discloses a cleaning spray nozzle comprising: a plastic nozzle body 20, a trigger valve 42, a toggle valve 46, outlet 24, and a cartridge 14.

Clear error #1. Styne discloses a spray gun for use in the art of lawn and garden chemical application, not a cleaning spray gun. (Col. 1, lines 12-13)

Clear error #2. Item 42 refers to the trigger, not the trigger valve, which is actually reference numeral 48.

Clear error #3. Item 46 refers to valve gear, not a toggle valve. Styne does not teach such a secondary, independently controllable valve.

Clear error #4. In order to anticipate an invention, a particular reference must disclose each and every feature of the claimed invention. Styne does not disclose "a toggle valve downstream of the trigger valve, the toggle valve being operable to direct flow between a clean water flow channel and a chemical dispensing flow channel" such as is taught by the claimed invention. As a result, Styne et al. is not capable of directing a water stream while a cartridge is attached, such that a user could alternate between a water stream and mixed chemical and water stream, unless such cartridge is empty. For these reasons, Styne does not anticipate the claimed invention and the rejection with respect to Styne should be withdrawn.

The applicant has shown that clear error occurred in issuance of the above-referenced rejections. Withdrawal of those rejections and allowance of all claims is respectfully requested.

Respectfully submitted,
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